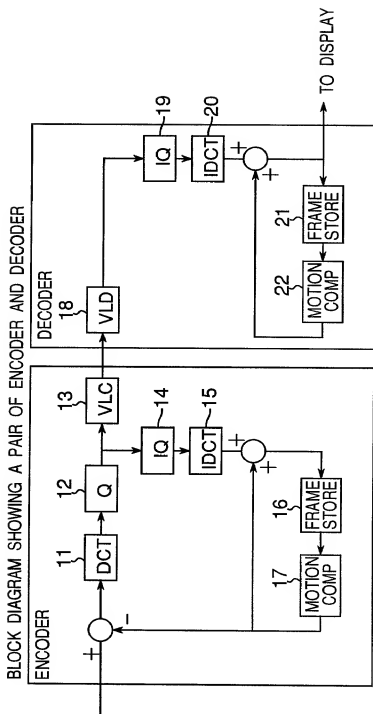


Fig. 1



LEGEND:

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD

IQ

IDCT

FRAME STORE

MOTION COMP

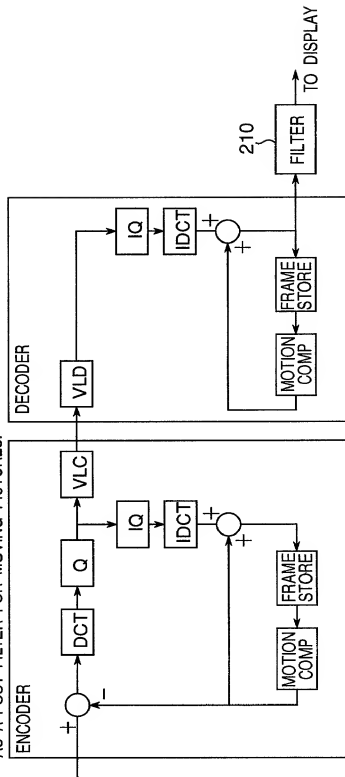
- VARIABLE LENGTH DECODING

- INVERSE QUANTIZATION

- INVERSE DISCRETE COSINE TRANSFORM

Fig.2

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER
AS A POST FILTER FOR MOVING PICTURES.



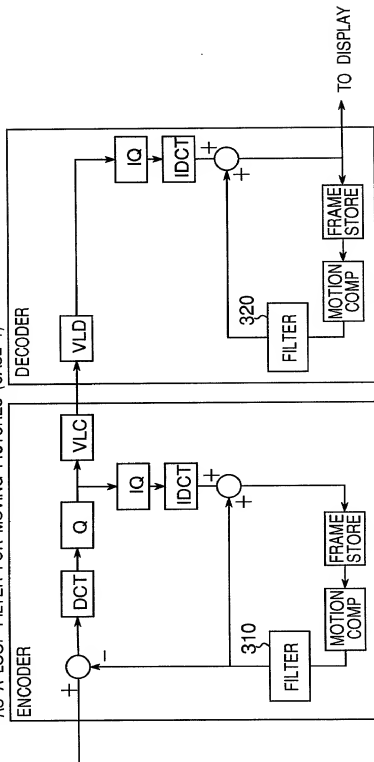
LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM
Q - QUANTIZATION
VLC - VARIABLE LENGTH CODING
FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE
MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING
IQ - INVERSE QUANTIZATION
IDCT - INVERSE DISCRETE COSINE TRANSFORM
FILTER - BLOCKY NOISE REMOVAL

Fig. 3

BLOCK DIAGRAM SHOWING THE LOCATION OF THE FILTER AS A LOOP FILTER FOR MOVING PICTURES (CASE 1)



LEGEND:

LEGEND -

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

- QUANTIZATION

- QUANTIZATION
- VARIABLE LENGTH CODING

FRAME STORE-STORE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING

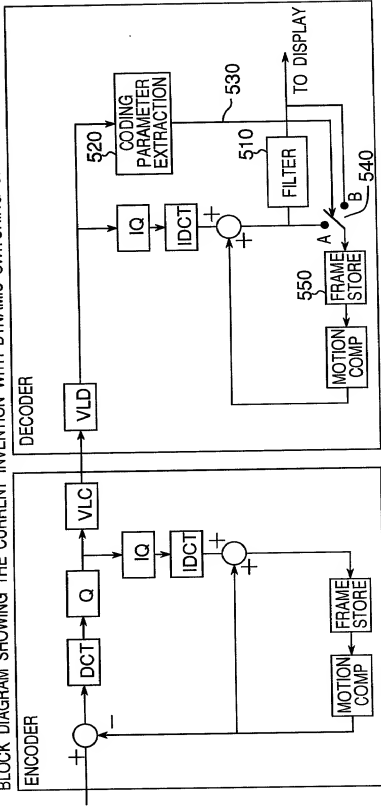
INVERSE QUANTIZATION

INVERSE DISCRETE COSINE TRANSFORM

FILTER - BLOCKY NOISE REMOVAL

Fig.5

BLOCK DIAGRAM SHOWING THE CURRENT INVENTION WITH DYNAMIC SWITCHING OF THE LOOP FILTER



LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING

IQ - INVERSE QUANTIZATION

IDCT - INVERSE DISCRETE COSINE TRANSFORM

FILTER - BLOCKY NOISE REMOVAL

Fig.6

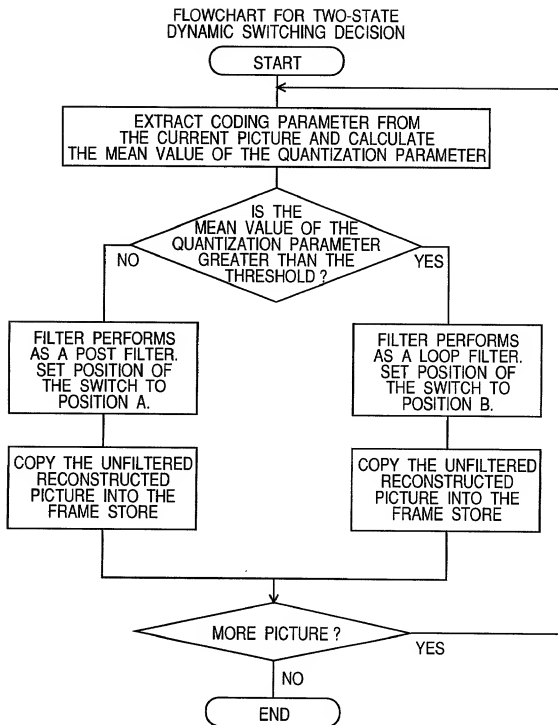
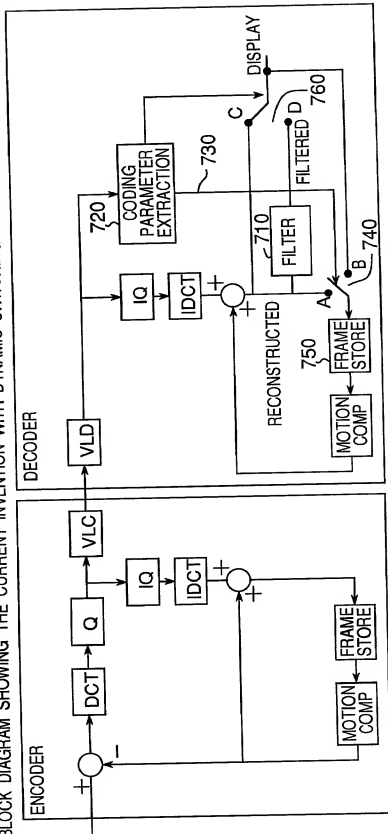


Fig. 7

BLOCK DIAGRAM SHOWING THE CURRENT INVENTION WITH DYNAMIC SWITCHING OF THE LOOP AND POST FILTER



LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING

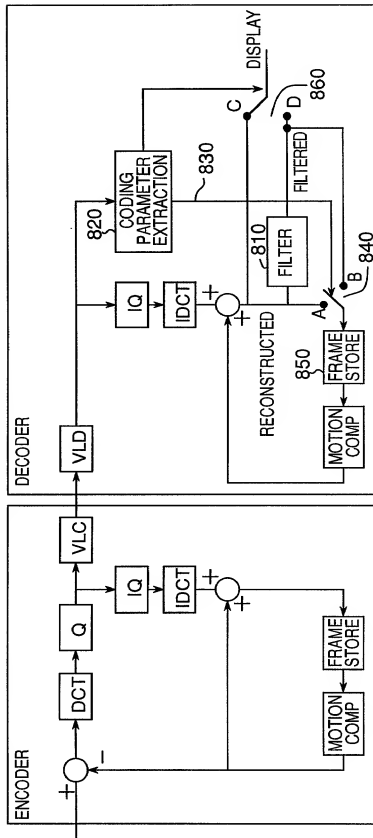
IQ - INVERSE QUANTIZATION

IDCT - INVERSE DISCRETE COSINE TRANSFORM

FILTER - BLOCKY NOISE REMOVAL

Fig.8

BLOCK DIAGRAM SHOWING THE CURRENT INVENTION WITH DYNAMIC SWITCHING OF THE LOOP AND POST FILTER



LEGEND :

DCT - BLOCK BASED DISCRETE COSINE TRANSFORM

Q - QUANTIZATION

VLC - VARIABLE LENGTH CODING

FRAME STORE - STORAGE FOR PREVIOUS RECONSTRUCTED PICTURE

MOTION COMP - MOTION COMPENSATION MODULE

VLD - VARIABLE LENGTH DECODING

IQ - INVERSE QUANTIZATION

IDCT - INVERSE DISCRETE COSINE TRANSFORM

FILTER - BLOCKY NOISE REMOVAL

Fig.9

FLOWCHART FOR 3-STATE
DYNAMIC SWITCHING DECISION

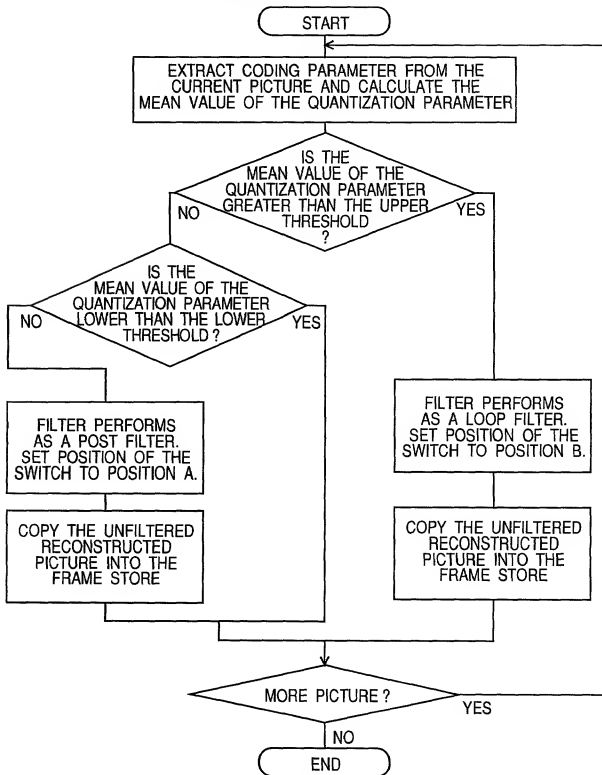


Fig.10

THE MOTION PREDICTION DIRECTION OF I, P-AND B-PICTURES

